DOCUMENT RESUME

ED 116 187 CS 002 364

AUTHOR	Smith, Marshall S., Ed.
TITLE	Reading Comprehension and the High School Graduate, Panel 7; Conference on Studies in Reading (Washington, D.C., August, 1974)
INSTITUTION	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Sep 75
NOTE	38p.
EDRS PRICE	MF-$0.76 HC-$1.95 Plus Postage
DESCRIPTORS	Higher Education; *High School Graduates; Instructional Programs; Intervention; *Reading Comprehension; *Reading Research; Reading Skills; Testing; Underachievers; Writing Skills
IDENTIFIERS	*National Conference on Studies in Reading

ABSTRACT

The problem of this conference panel was to develop a research and development agenda to improve the reading and writing proficiencies of high school graduates. This panel report consists of four approaches to the problem: studies of the problems of ill-prepared high school students; surveys of the reading and writing tests used by colleges and universities; analysis and description of intervention programs implemented at the college level, including positive and negative results; and exploration of new instructional strategies in order to understand the pedagogical directions of successful experiences and the ways of encouraging commitment to new approaches. A bibliography is included. (JM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED116187

reading comprehension and the high school graduate

7

conference on studies in reading

nie

u.s. department of health, education and welfare

national institute of education

CS 002 364

CONFERENCE ON STUDIES IN READING

"It was unlawful, as well as unsafe, to teach a slave to read.

'It will forever unfit him to be a slave. He will at once become unmanageable and of no value to his master.'

These words sank deep into my heart. From that moment, I understood the pathway from slavery to freedom. Though conscious of the difficulty of learning without a teacher, I set out with high hope and fixed purpose, at whatever cost of trouble, to learn how to read."

Frederick Douglass

NATIONAL INSTITUTE OF EDUCATION

Washington, D.C.
September 1975

NIE CONFERENCE ON STUDIES IN READING

PANEL 7

READING COMPREHENSION AND THE HIGH SCHOOL GRADUATE

PARTICIPANTS

Panel Chairperson:

Ms. Mina Shaugnessy
Instructional Resource Center
City University of New York

NIE Liaison:

Ms. Nancy Yanofsky

Panel Members:

Dr. Jeanne Chall
Graduate School of Education
Harvard University

Dr. Donald Graves
Department of Education
University of New Hampshire

Dr. Alan Weisberg
Commissioner's Planning Staff
Massachusetts State Department
of Education

Dr. Sloan Williams
Institute for Services to Education
Washington, D.C.

Field Consultants:

Mrs. Dee J. Coulter
School Teacher
Boulder, Colorado

Dr. Larry Cuban
Superintendent of Schools
Arlington, Virginia

Mr. Robert Cumming
Humanities Department
Lander College

Ms. Bertha Doleman
College Skills Division
City College of New York

Dr. Janet Emig
Department of Science and
Humanities
Rutgers University

Dr. Helen Felsenthall
Language Arts Program
Research for Better Schools, Inc.

Ms. Arlene Fingeret
Education Warehouse
Cambridge, Massachusetts

Dr. Elizabeth Koontz
Director of Human Resources
North Carolina State Department
of Education

Dr. Abraham Kupersmith
Department of English
Manhatten Community College

Dr. Claude Mayberry
Dean of Students Office
University of Pennsylvania

Dr. Paul Panes
Department of Basic Educational
Skills
Queensborough College

PANEL 7

READING COMPREHENSION AND THE HIGH SCHOOL GRADUATE

TABLE OF CONTENTS

		PAGE
INTRODUCTION		1
APPROACH 7.1:	STUDIES OF STUDENTS	7
APPROACH 7.2:	TESTING AND DIAGNOSIS	12
APPROACH 7.3:	INTERVENTION PROGRAMS	17
APPROACH 7.4:	EXPLORATION OF NEW INSTRUCTIONAL STRATEGIES	22

PREFACE

The National Institute of Education (NIE) came into being during 1972. Its authorizing legislation requires the NIE to:

- Help solve or alleviate the problems of, and achieve the objectives of, American Education.
- Advance the practice of education as an art, science, and profession.
- Strengthen the scientific and technological foundations of education.
- Build an effective education research and development system.

In order to aid in meeting these general objectives, the National Council on Education Research (NIE's policymaking body) approved the creation of five priority programs in December, 1973. One of the priority programs was Essential Skills.* Its purpose was:

> To investigate through research and development, ways to aid all children to obtain skills essential for functioning adequately in school and society.

The initial focus of the Essential Skills Program was in the area of reading. Broad guidelines for an NIE effort in reading had been developed in a small conference held on Cape Cod during the late summer of 1973.** During 1974, the Essential Skills Program carried out an intensive effort designed to formulate more specific plans for funding research and development activities in reading. A variety of meetings were held with groups of teachers, school administrators, and scientists to designate directions for the program. The most ambitious of the meetings was held in Washington, D.C., in August, 1974, and directly involved over 175 individuals -- 50 as Conference participants and 125 as consultants to the Conference. This report is the product of one of the 10 panels of the August Conference.

The impetus for the Conference stemmed from a number of concerns about the state of Federal funding of research and development in education. Four concerns stood out in particular for reading.

1. Research in the field of reading was fragmented and noncumulative.

---

*During the past few months, the Essential Skills Program has been renamed the Learning Division of the Basic Skills Group. Both the Basic Skills Group and the Learning Division continue to follow the guidelines set out by the National Council in December, 1973 (above).

**See Miller, George A. (ed.) Linguistic Communication: Perspective for Research, International Reading Association; Newark, Delaware, 1974, 45 pp.

2. The Federal Government was not making constructive use of the state of knowledge in the field in their decisions to fund new research and development.

3. There was a lack of positive and firm coordination between the Federal Government and the professional research and practitioner organizations around the country.

4. A large number of scientists in a variety of disciplines carry out research with relevance to reading. We considered it important to attract these scientists to work in the applied areas of educational research.

The Conference itself was a step in meeting these concerns. During the past year, the NIE has been developing plans for funding research and development in reading for the next two years. Suggestions from the Conference have played an important role in this process. But planning is an ongoing process and we hope by publishing and widely disseminating the reports from the Conference to stimulate discussion of the reports, of research and development in the field of reading, and, indirectly, of the plans of the Institute.

To some extent the format for the Conference was influenced by three other similar efforts of the Federal Government. In the area of health research, the conferences leading to the National Cancer Plan and the National Heart and Lung Institute Plan served as partial models. Within NIE, the Teaching Division had held a major planning effort in the area of teaching research during the early summer of 1974. The intent in each of these efforts was to develop a coherent set of documents that would be responsive to the needs of the American public and to knowledge in the field.

We felt it necessary to structure the Conference in two important ways. First, after extensive consultation with scientists and practitioners in the field we arrived at the conclusion that major efforts in the past had often ignored or down-played the critical importance of the stage of reading called "reading comprehension." Although we realized the impossibility of actually separating out "reading comprehension" from the earlier stage of learning to read -- which requires the learner to be able to translate written letters and words into speech -- our advice suggested that the comprehension or "reading for meaning" stage required far more attention than it had received in the past. Consequently, seven of the ten panels focused on problems in this area. Second, to direct the focus of the panels to planning future research we requested the panelists to organize their ideas into general approaches within the problem area, within the approaches to suggest programs for research, and, finally, when possible to specify particular research or development projects.

The seven panels addressing problems in comprehension spanned a wide range of concerns. The first three panels focused on basic research issues. Their panel reports are titled: Semantics, Concepts, and Culture; The Structure and Use of Language; and Attention and Motivation. The fourth panel was asked to consider the problem of Modeling the Reading Process. The fifth panel directed its attention to the issue of measuring how well people read and its report is titled Assessment of Reading Comprehension. The sixth and seventh reports directed themselves respectively at the practical problems of the Application of Existing Reading Comprehension Research and Reading Comprehension and the High School Graduate. The final three panels directed their attention to three pressing concerns in early reading: Learning and Motivation in Early Reading; Reading Strategies for Different Cultural and Linguistic Groups; and Essential Skills and Skill Hierarchies in Reading.

Although the reports have undergone some revision and editing since the Conference, the major part of the work was done in concentrated sessions in the space of a few days. The resulting documents are not polished or exhaustive. They are meant to be working documents to stimulate debate, suggestions, and comments. Such comments or requests for other reports should be directed to:

Director, Learning Division
National Institute of Education
Washington, D.C. 20208

The work of organizing the Conference was carried out by members of the Essential Skills staff at the NIE -- each of the panels had an NIE staff person as a permanent liaison. Special acknowledgments are due to Susan Duffy and Donald Fisher for their assistance in preparing the reports for publication and to Arthur Young & Company for coordination and arrangements before, during, and after the Conference. Finally, the work of NIE cannot proceed without the kind of skill, involvement, and hard work given by the panel chairpeople, panelists, and consultants for this Conference. The ideas and emphases in the reports are the products of their cumulative expertise.

Marshall S. Smith
Conference Chairperson

LIST OF PANEL REPORTS AND CHAIRPERSONS

1. Semantics, Concepts, and Culture, Dr. George Miller, Rockefeller University

2. The Structure and Use of Language, Dr. Thomas Trabasso, Princeton University

3. Attention and Motivation, Dr. Sheldon White, Harvard University

4. Modeling the Reading Process, Dr. Richard Venezky, Wisconsin University

5. Assessment of Reading Comprehension, Dr. Ernst Rothkopf, Bell Laboratories

6. Application of Existing Reading Comprehension Research, Dr. Lauren Resnick, University of Pittsburgh

7. Reading Comprehension and the High School Graduate, Dr. Mina Shaugnessy, City University of New York

8. Learning and Motivation in Early Reading, Dr. Richard Hodges, University of Chicago

9. Reading Strategies for Different Cultural and Linguistic Groups, Dr. Manuel Ramirez, University of California, Santa Cruz

10. Essential Skills and Skill Hierarchies in Reading, Dr. Irene Athey, University of Rochester

PANEL 7

READING COMPREHENSION AND THE HIGH SCHOOL GRADUATE

INTRODUCTION

Problem Area Statement

The stated goal of public education in the United States has long been to equip all citizens with the necessary skills and information to live productive and fulfilling lives as defined by the society and by each individual within that society. However, hundreds of thousands of young adults, whose educational needs differ in many respects from those of "typical" college students, have entered college during the past decade. Their lack of traditional educational knowledge and skills has dramatically heightened our awareness of how far short of our goal we have fallen.

The entry of the "new" students into higher education is part of a much larger cultural and economic shift that has occurred in our society during the last ten years. The reasons for this shift are complex, but certainly include:

1. Students' awareness that they have access to and a right to opportunities denied their parents;

2. The rising demand for skilled workers in an increasingly service-oriented society;

3. Society's widespread view that there are advantages in cultivating individual talents and interests, not only as economic assets but as a means of enriching and humanizing one's life.

It would be inaccurate to say that "nontraditional" college students from diverse cultural, racial, and ethnic backgrounds have been totally ignored in the past. For years, many State colleges and universities have accepted underprepared freshmen, provided they were high school graduates and residents of the State. Other types of institutions have recently adopted similar policies in response to the increasing demand for educational equality. The creation of large numbers of community colleges, the adoption of open admission policies in many public colleges, and the efforts of private colleges to enroll students from diverse backgrounds directly reflect this trend. But with few exceptions (e.g., reading clinics), these institutions have taken little note of the educational needs of such students, subscribing instead to a "revolving door" policy. This policy has generally resulted in a high percentage of "rejects" at the end of the freshman year.

Estimates of the number of inadequately prepared freshmen vary. Not all of the freshmen whose reading and writing skills fall below levels adequate for college work are from socially or economically disadvantaged backgrounds. For instance, the National Reading Center reported that one-third of all freshmen who entered college in the Fall of 1972 lacked the basic reading skills they needed to meet minimal

requirements for college study (National Reading Center, 1972). R. H. Finch stated that more than half of the two-year college students are in need of remedial or compensatory programs (Finch, 1969). Paul Panes, a consultant to this panel, noted that "students functioning on approximately a junior high school instructional reading level, 7th to 9th grade, constitute as high as 50 to 60 percent of an entering freshman class in some community colleges in New York City. In some schools, however, specifically where bilingualism is predominant, the percentage may go up to 80 percent. The situation in the senior colleges may be somewhat better, but nevertheless, similar groups exist." (Panes, 1974)

The higher education community has begun to realize that this problem is not diminishing. The noted American historian Frederick Jackson Turner observed more than 50 years ago the need for educational adaptation to societal change: "Nothing in our educational history is more striking than the steady pressure of democracy upon its universities to adapt them to the requirements of all people." (Turner, 1920). As we now turn our attention to the large numbers of students requesting higher education who are lacking the basic skills of reading and writing, we have overwhelming proof of the relevance of Turner's statement to the critical situation facing us in the seventies. Clearly, the problem of underprepared freshmen needs attention.

Awakened to this significant educational problem, educators are becoming more aware of their own limitations in providing effective education for the "new students." Just as the "new students" are not prepared for colleges as they presently exist, so the colleges, with all their physical, intellectual, and human resources, are not prepared for the "new students." The problems of the colleges stem from a number of sources:

1. The majority of college teachers do not seem to have a sense of what has been happening educationally to these students before they arrive on the college campus. Aware that the students did not acquire sufficient reading and writing skills, the teachers are less able to assess the positive experiences and skills the new students have acquired in the process of growing up in America in the 20th century, e.g., those skills acquired through early employment or family responsibilities.

2. Many college teachers (untrained in pedagogy) do not know how to teach the new students. Aware of the pedagogical principle that one must begin from scratch, they are uncertain of where "scratch" is, and of how to determine the starting point when teaching such fundamental skills as reading and writing--skills students traditionally master sufficiently before their arrival at college.

3. Many college teachers have difficulty bridging the gap between research and practice. This problem becomes apparent when one asks educators to relate basic or even applied research to the

actual classroom situation, even when there is an awareness of and familiarity with research in reading, writing, language, psychology, and so on. Many college teachers are not certain of the curricular implications of this research for their students.

4. There is uncertainty about the kinds of institutional accommodations necessary to meet the needs of the new students. For example, what modifications or adaptations can institutions and teachers make in (a) traditional courses and course sequence; (b) hiring new teachers and/or retraining old teachers; (c) optimal class size; (d) fitting specialists in reading and writing, traditionally associated with the lower grades, into the academic organization to maximize their potential contribution to both students and faculty?

These are a few of the questions that educators now seek to answer and that any research and development agenda on the reading and writing problems of high school graduates must attempt to address. This panel's opinion is that although we can and must search out much of value in the body of experience and research that already exists, there remain many questions to explore, many assumptions and intuitions to test, and many experiences to assess before colleges are ready to meet their responsibilities to the new students.

Until now, several conditions have hindered research. Until recently, most postsecondary institutions had only a small number of new students and therefore gave only minimal attention to this population's problems. Arlene Fingeret, Director of the Education Warehouse in Cambridge, Massachusetts, writes:

> Due to larger numbers of students who are inadequately prepared for traditional college-level reading who are now enrolling in higher educational institutions, the problems of the adult poor reader are finally becoming societal priorities. There have been, for many years, adult education programs offering improvement in the literacy skills instruction for adults, but these programs have not provided, initiated, or been encouraged in any way to do the research and development that is needed in the field in order for them to be able to maximize their service delivery capabilities. When the research has been done, and materials developed, they have not been able to or encouraged to share them in any broad way. (Fingeret, 1974)

However, beyond this reason there may have been and may still be deep doubts about the native abilities of these students either to acquire a high proficiency level in the basic skills of reading and writing or to grasp the content of typical college courses. Many

college faculty and even some of the general public have a strong conviction that at the time students enter college it is too late to "catch up" in reading and writing, no matter what their talents may be. Such "linguistic fatalism," which holds that significant linquistic development has been reached by age 18 and probably much before that age, reinforces the idea that underprepared incoming college freshmen are the "old people" in the developmental process: Students of the 11th hour whose prospects for improvement are too frail to warrant significant educational and/or economic investments, particularly in the traditional time-frame (4 years) of college.

This panel, however, believes that the underprepared college freshman (18 years or older) is indeed capable of further learning, specifically of mastering language skills. Some evidence for this belief is anecdotal, some is historical, and some is found in the research in education journals.

In conversations of college faculty and administrators the topic of low achievers, or of underprepared or "high-risk" students inevitably arises. People are always able to point to at least one "success story" on their campus.

Looking back at the crash efforts of the Armed Services during World War II, one can gather historical evidence. The services made a positive attempt to advance the reading level of low achievers in the military and to train highly skilled personnel (technicians, mechanics, and so on) from a pool of men, many of whom lacked high-level reading and study skills; often they were low performers in high school. Further evidence comes from the persistent efforts of southern Black colleges. These institutions had "high school departments" aimed at underskilled Black youth. The Defense Department's "100,000" program in the late sixties reveals more recent evidence. This program was specifically aimed at young men considered noncollege material, more often than not high school dropouts or pushouts. The educational benefits available to veterans since World War II have shown us both a positive approach to new students and possible evidence that such an approach gives society untold social and economic benefits. War on Poverty programs, e.g., Upward Bound, Job Corps, Youth-Tutoring-Youth, Neighborhood Youth Corps, and Career Opportunity Programs provide us with additional historical evidence. Now is the time to analyze this existing body of information, experience, success, and failure.

Finally, a number of articles in the literature describe programs that have increased students' motivation and ability to read and write. (Harshburger, 1972; Egerton, 1973; MacDonald, 1972; Dubois, 1969; Klasser, 1972; Turning, 1972; Glen, 1964; Bucklin and Bucklin, 1971; Bingen, 1973; Price, 1966; Beringhause, 1965; Miller, 1973; Phillips, 1972; Perry, 1969.)

The panel is by no means saying that enough evidence exists or that researchers have systematically collected or investigated enough. We believe that much more evidence on the academic performance of the new students as writers and readers and scholars in specific courses and contexts is necessary for us to assess more objectively the educability and potential of the new college students. Our recommendations in the program sections support this position.

Educators must also describe and analyze the external causes of failures. For us to assess how the new students' initial lack of basic skills inhibits their ability to succeed, it is essential that any "dropout" rate or other cause of failure be related not only to entering characteristics, but also to personal and social characteristics such as financial pressure, personal crises, transfers to other schools and/or jobs, and the quality of instruction. We can no longer assume that lack of basic skills is the only or primary cause for new-student failures.

In carrying out its charge to develop a research and development agenda to improve the reading and writing proficiency of high school graduates, the panel has found itself moving in certain directions. While our main focus was on the needs of the new students, we found that the programs we recommended would be of benefit to all college students. We have also had difficulty in confining our discussions and proposals to reading problems alone, when the skill of writing is so closely linked to reading and the two skills together represent the total use of written language. Fragmentation of these two skills in the minds of teachers and in the structures of departments is lamentable and wasteful. This panel, itself made up of both writing and reading teachers, believes strongly that the resources of both areas would be enriched by an alliance, and not merely a truce.

In the same spirit, the panel has stressed the importance of collaborative studies and methods to enable experts from such areas as psychology and linguistics to work with skills teachers on the learning problems of common concern to them. In addition, we encourage and endorse the integration of skills instruction with content courses, an effort requiring the collaboration of content teachers and skills teachers at every step.

Finally, because of the pressing needs for certain kinds of information about the new students, we have chosen to focus some of our research proposals on questions that would yield what might be called short term, practical results. Yet, some of the questions we raise depend upon research techniques and modes of analysis that lie more in the area of basic research. For this reason, we hope that the worlds of practitioners and researchers will merge more frequently and under conditions that encourage exchange.

The programs of research which we recommend in this report are organized into the following four approaches:

Approach 7.1--Studies of Students
Approach 7.2--Testing and Diagnosis
Approach 7.3--Intervention Programs
Approach 7.4--Explorations of New Instructional Strategies

APPROACH 7.1

STUDIES OF STUDENTS

Approach Rationale

College freshmen are not simply people enrolled in some courses but students living in an academic world, a world which sets many tasks for its members beyond those teachers articulate in the classroom. Faced with many new administrative responsibilities (budgeting time, energy, and money), a variety of strange traditions and procedures, and an organizational structure that bewilders even experienced academics, freshmen are much like visitors in a foreign country or, at the least, apprentices in a new job.

Generally, new students are not properly students when they arrive at college; they have neither formed study habits nor experienced the rewards of studying. Many such students lack models for "studenthood." Often they are the first of their families and friends to attend college. Furthermore, having observed teachers only after the teachers have mastered their materials, they often have no sense of what studying entails. In particular, they lack criteria for thoroughness, for knowing when they have gone far enough or deep enough into a subject or assignment; they have difficulty assessing the amount of energy or time they need to carry out an assignment or how to make use of the resources on the campus (not only such obvious resources as libraries, but also such resources as their peers and informal discussions with other teachers). Often their queries about the number of pages to write, the number of examples to include, the importance of certain items on tests, and so on, appear to be cynical negotiations to avoid work when, in reality, they are trying to have teachers specify the work expected of them.

Many students are often reluctant to commit their energies to schoolwork. One can only conjecture why this reluctance occurs; we understand little about the dilemmas academia poses for students accustomed, if not to failure, at least to anonymity and passivity in academic situations. We can, however, assume that much of the incentive to work comes from being in an environment conducive to work. For the college, this environment means not simply improving conditions within the classroom, but determining ways in which an institution as a whole can encourage or discourage the urge to learn.

Central to this understanding is a more detailed, probing study of the students themselves--their strengths as well as their academic deficiencies, their attitudes toward their academic environment in its many aspects, and the patterns of success as well as failure that

they have already experienced in academic programs. The results of such studies have great policy implications. We should be able to determine accurately how open enrollment has been received and how it has or has not worked with students.

The panel is persuaded that inadequately explored assumptions have shaped much of the research and many of the programs affecting the new population of students. These assumptions include but are not limited to the following:

1. That the new students, because of their skill deficiencies in reading and writing, are not capable of making up for lost time so that they can manage the academic work required of them;

2. That the motivations and aspirations the new students hold concerning a college education are different from those of traditional college students, and that these differences are incompatible with academic learning;

3. That these students, despite their skill deficiencies, bring to the classroom a world of experience and highly developed cognitive, nonschool skills which, if properly directed, can enable them to make up for lost time and achieve academic success.

Although the panel tends to support the third assumption and reject the first two, there is insufficient information to support any of these widely held assumptions. Knowledge about these new students is fragmentary. We need to know the conditions that make success in college possible--remedial reading programs, counseling opportunities and experiences, special provisions of content courses and so forth. We are not interested in yes or no answers; we are seeking to understand those conditions that lead to student success in spite of initial handicaps and that enable students to overcome their reading and writing handicaps.

Most research on the new students and the instructional programs serving them is limited largely to studies of across-the-board attrition rates that do not account for the variables that may cause attrition: Job demands, family responsibility, leaves of absence, and so on. We now need to conduct systematic studies of students in those "11th hour" programs that are apparently successful in teaching basic language skills to young adult populations.

With the advent of open admissions, there are even larger numbers of students entering college with reading difficulties severe enough to prevent them from doing their college work well. No one knows what the exact numbers are. Indeed, these estimates tend to vary according to the minimal criteria used by the college or by an individual making the estimate. According to one English professor at a southern

women's college with a recent open enrollment policy, about 50 percent of the students have significant reading problems, and a few read below the sixth-grade level. In that same college, most of the faculty estimates that about 20 percent of the students have difficulty with the reading in their courses (Cummings and Cummings, 1974).

In pursuing this kind of information, more researchers will doubtless use the case study approach. Before we spend large sums of money on projects of an interventionist or descriptive nature, we can use the case study approach to point the way to an exploration of both the reading and writing skills of the new college freshman and the reading and writing demands which college makes. Some of the areas that appear to merit consideration as critical points for case studies in reading and writing are the following:

1. Students with high, average, or low prediction of reading success.

2. Critical locations within freshman curriculums where there is a high prediction of failure--(e.g., biology, physics), and where reading is a suspected contributing variable.

3. Commuters and noncommuters to higher learning settings.

4. Students with unusual background experiences, i.e., vocational experience, specialized concept backgrounds.

5. Students with unusual high school backgrounds.

6. Students from different ethnic and cultural backgrounds.

It is extremely important not to box ourselves into one methodological approach. Because this area is relatively new and unexplored, larger studies also deserve consideration. One type of study might be a survey of the characteristics of the new students at school, system, and regional levels.

"Studenthood" is a very broad and important concept. For the individuals involved, the concept of studenthood entails allowing themselves to be in a position of possibly failing, knowing that they have tried. It also means allowing themselves to identify with a community, a set of skills, and an image that often veers sharply from that to which they are accustomed. It means dealing with prejudices and preconceptions, often in a fairly nonsupportive environment, and dealing with their "old" image at home with family and long-standing friends. The implications of accepting the role of student and succeeding at it are far-reaching in their effect on students' personal lives and goals, family ties, and future interests. For many students, the process of integrating the emerging image and new skills with past ties is a major obstacle to the smooth transition to studenthood that living in a college environment now demands.

In addition, many students lack self-evaluative skills as well as confidence in what skills they do possess. On one level, how do they know they have the main idea, that they have understood the intent of the question? How can they check themselves? Why put themselves on the line in the struggle for achieving studenthood when they are not really sure they are capable of learning anything? With new skills and an emerging consciousness of the power of these literacy skills, many students continue to lack confidence in their abilities to evaluate the skills they are acquiring, or are still lacking.

The following programs should shed considerable light on the problems of the ill-prepared high school graduate. These problems are realities in most institutions of higher learning. It is now time to investigate the many aspects of this problem heretofore unstudied, and, in some cases, ignored.

Program 7.1.1:

Conduct surveys (at the regional, system, or school level) to determine the characteristics of new students entering college.

Program 7.1.2:

Conduct exploratory studies on both the nature of the experiences new students bring to the academic setting and the extent to which these students have engaged in the kind of thinking required in academic work.

Program 7.1.3:

Determine the strengths new students bring to the academic setting: Greater motivation stemming from the decision to return to school; positive attributes of experience related to family and employment responsibility; motivation stemming from a "second chance" situation; maturity which enables them to set their own goals and be in touch with their own learning styles.

Program 7.1.4:

Conduct case studies of individual students who have successfully completed college programs after entering college with deficient basic skills. What characteristics of these students apparently determined their success? What strategies and conditions facilitated their transition to studenthood?

Program 7.1.5:

Study the impact of pragmatic academic counseling upon the adjustment of freshmen to college work.

Program 7.1.6:

Analyze the tasks of being a student, identifying in particular the kinds of skills and awareness we assume students have when they enter college.

Program 7.1.7:

Study student perceptions of success in academic settings to determine the conflict students see and experience in integrating personal life and growth with academic life and growth. Determine strategies underprepared freshmen use successfully to cope with conflicts.

Program 7.1.8:

Study the effect of variables such as teacher attitude, peer group representation and support, perceptiveness, and accuracy of students' self-diagnosis upon the will to read and write.

Program 7.1.9:

Study student attitudes toward written language and reading.

Program 7.1.10:

Study the relationship between students' self-concepts and attitudes toward reading and writing.

Program 7.1.11:

Study the relationship between students' achievement and learning style.

APPROACH 7.2

TESTING AND DIAGNOSIS

Approach Rationale

There is a very serious need for a closer study of the testing of reading and reading-related skills in colleges and universities. At first sight, it appears to be crucially important only in those colleges with large numbers of new students (and indeed this is our primary focus), but it is of great importance to all colleges--even to those with a more select student population. Many of the older, more established colleges carried out some of the pioneering work in testing and remediation. For example, Harvard College routinely tests incoming freshmen on a special reading test, based on reading a typical college assignment, a chapter from a textbook in the social sciences. According to William Perry, author of the test, it is highly predictive of grade averages. The major purpose of this test is to identify for further help those freshmen lacking the more refined and advanced reading skills of knowing what to read and what not to read, how fast or slowly to read it, and what to report.

A survey of reading programs at Black colleges and universities, by Karen Thompson, an intern in the NIE Essential Skills program, contains useful information about the kinds of reading programs, the materials they use, the criteria for selecting students, and the tests for placing students in their reading programs. However, because this report was only preliminary, it did not include evidence of the effectiveness of the methods and materials, the ability of the reading tests to find the students needing help, the ability of the tests to find the specific strengths and weaknesses of each student, and the sensitivity of the test to measure progress. (All of these issues will be covered in this Approach Rationale and in the programs that follow.)

It may very well be that other colleges and postsecondary schools have developed their own reading tests for their own needs, and that these tests may be useful for other schools. A survey of the kinds of reading tests postsecondary institutions use would discover the types and benefits of such diagnostic instruments.

In approaching this problem of testing and diagnosis, we must consider the purposes of reading tests in colleges. It appears that one major purpose of a good testing program is to provide data necessary for policy decisions about students and more specific decisions regarding instruction and remediation. Thus, tests must first show whether or not students have acquired the general reading skills

sufficiently to be able to do their course work without special intervention. However, a major stumbling block is in operation: Poorly constructed and poorly analyzed tests.

For a variety of reasons no adequate diagnostic tests now exist. Many of the tests were originally written and normed for children. They do not allow for the conceptual and specialized vocabulary growth of adults. Many adults have not learned the basic strategies needed in taking conventional standardized tests (such as multiple choice tests), and these inadequate test taking strategies produce invalid estimates of their reading comprehension abilities.

Tests written to evaluate reading comprehension skills often do not allow for diagnosis of the more basic skills necessary for answering a question, so that even when students get an answer wrong, there is still a lack of information about what the real problem is. Often, students who are accustomed to seeing themselves as lacking in reading skills won't even attempt to answer a question which appears, on the surface, to be too difficult, even though in reality it is within their ability. In designing diagnostic tests for underprepared freshmen, the first step has to be a study of why what we have is not suitable. We then need to develop a design that will fill the needs of the students (who often want a realistic appraisal of their strengths and weaknesses), the teachers (to feed into course design and teaching methods and techniques), and the institution (for data to help plan supportive programs for the students).

A concurrent problem is the lack of knowledge about reading and writing necessary for college work, and, more specifically, for a particular course of study at college. Students' skills may be more than adequate for a course of study in retail sales, but not for a course of study in engineering.

The question of sufficient reading and writing skills to cope with academic assignments is relevant to all colleges. The question of identifying diagnostic tests to provide this kind of information is crucial. To date, the tests most widely used have been standardized achievement tests like the Nelson-Denny Test and the Iowa Silent Reading Test. These are basically survey tests, although they afford some comparisons of different aspects of reading. Thus the Nelson-Denny can give separate estimates of word meaning, reading comprehension, and reading rate. However, all the subtests are timed, so rate is probably a factor in all three measures. The same is true of the Iowa Test.

Both of these tests are norm-referenced, in that the measures are basically comparisons of students taking the tests, rather than descriptions of masteries of particular skills. As with most existing norm-referenced tests, the raw scores translate into grade-level equivalents or percentiles. These tests have received considerable criticism through the years, primarily because the results can easily

be misinterpreted unless used with understanding and sensitivity. The problem is exacerbated by the lack of personnel qualified to work with new students, qualified in the sense that they possess proper theoretical training and actual experience in teaching young adults to read.

The grade-level equivalents of standardized subtests are particularly problematic when used with college students. What does it mean when college freshmen test at the 8th-grade level on reading comprehension? A valid answer might be that they have mastered some of the fundamental skills of reading at about the level of average 8th graders. But what does this mean for college-level work? We do not know too much, but it is fairly accurate to predict that without a careful assessment of specific strengths and weaknesses and subsequent remediation, the students' staying powers in most academic course work will be very short. (We can also validate this statement by examining differential dropout rates.) Eighth-grade reading level is usually insufficient for "typical" college level work.

In short there is little information to assist in the diagnosis of reading and writing deficiencies (and/or strengths) of new students. There is a concommitant lack of instruments that assess attitudes and proficiencies in specific content areas. For example, new findings in the area of self-concept indicate that although there is a global self-concept that may be reasonably stable, within the same self-concept profile there can be great variability in self-concept when applied to specific subject areas that depend substantially on high level reading and writing skills, e.g., biology, psychology, history. At the present time, there is a need for instruments to assess self-concept in areas other than reading and writing. Further, there is some evidence suggesting that different disciplines present some unique reading demands. Students may be able to read in an introductory political science textbook successfully, yet be unable to handle the reading demands of an introductory biology course. The evidence raises two issues: Readability and introductory knowledge. We discuss readability here, and introductory knowledge in Approach 7.3.

One hypothesis we suggest is that the difficulty in biology as opposed to political science may be due to the variance in logic, writing style, unfamiliar vocabulary, or concept load contained in biology texts, contrasted with the more familiar demands contained in the political science tests. We do not know much about reading variance among content areas, the effect it has on students, the accommodations that teachers make to assist students with apparent problems, or reasons why some students are indeed having difficulty with the course.

We speculate here that the "teachability" of a text may be a more useful concept than its readability. Traditional measures of readability are based on vocabulary and sentence length. Such measures, however, may not be accurate ways of assessing the

usefulness of a text for teaching a new area. The concept of teachability, as we use it, gives consideration to the relationship between the text and the course content, the content of the field, and the teaching style of the instructor. Such an approach links questions of design or choice of appropriate texts with broader issues of curriculum design.

Development of new diagnostic tests will be an important addition to any institution working with open admissions and/or underprepared students. They can use the new tests in deciding on the need for special help or the adjustment of reading and writing assignments. They can also prove extremely beneficial to the remedial teaching process by providing clues as to what textbooks and other materials students can handle and understand in terms of the readability level, the linguistic complexity, the level of sophistication of ideas, abstractions, and so on.

As a result of a survey of reading and writing tests in colleges and universities, the field should be able to determine with more accuracy the following: how a representative group of colleges and universities now use reading, reading-related (e.g., spelling), and writing tests; how often they use such tests; why they use specific tests; how they employ results; if they give retests and, if so, why; and what sorts of new tests present test users need. We could certainly use the results of this survey to develop new assessment and diagnostic instruments.

Program 7.2.1:

Survey reading, spelling, and writing tests currently in use in colleges and universities, with special emphasis on tests for open admissions students.

Program 7.2.2:

Develop diagnostic tests that accurately assess the reading and writing strengths and weaknesses of freshmen in open admissions programs.

Program 7.2.3:

Develop tests that assess student attitudes toward reading and writing in general, and content courses specifically.

Program 7.2.4:

Analyze whether the current practice of using standardized reading tests for identifying students needing help in reading and writing is effective.

Program 7.2.5:

Determine what procedures we can use to identify deficient students before they reach college age. Are test scores from high school useful here?

Program 7.2.6:

Analyze academic languages in textbooks in order to identify the distinctive problems specific content areas pose.

Program 7.2.7:

Develop for college texts readability criteria that are sensitive to the skills and learning styles of new students. Implement the concept of teachability of a text.

APPROACH 7.3

INTERVENTION PROGRAMS

Approach Rationale

Although the problem of inadequate reading comprehension among students at the college level seems to be a new one, coming with the advent of the recent open enrollment programs in urban and community colleges, it is actually not new. Indeed it would appear that Black colleges have faced this problem from the start, and, indeed, still face it (Blake, 1971). Thus, Blake notes that the Black colleges were a major force in the development of literacy programs for Black people. "For example, from 1865 to 1930 a totally illiterate people advanced to slightly over 80 percent literacy. Between 1890 and 1930 Black literacy increased 93.8 percent compared to 32 percent for the southern region as a whole." However, even by 1968, of those who entered Black colleges as freshmen, only 35 to 40 percent graduated, as compared to 50 to 55 percent nationally. Regarding the background of students in Black colleges, Blake notes:

> Looking at the entering freshmen, one wonders if any other college could do as well. In a sample of fourteen colleges, public and private, the median income was $3,900 and from a third to half of the mothers and fathers were domestics and laborers with less than a high school education. Their freshman test performance was about one standard deviation below the norms for the nation, except for a non-verbal test on which they scored slightly above average.

In a real sense, only the magnitude of the problem is new; as we noted above, Black colleges, as well as State universities, and non-traditional, private institutions have for some time been dealing with a considerable percentage of students deficient in the communication skills of reading and writing necessary for successful college work. The previous practice of expecting the student to meet the reading skill requirements of the various academic courses resulted in a sizable attrition rate among freshmen and sophomores, especially among the low achieving or underprepared high school students. Today, with the building of institutional responsibility and accountability, the universities are reexamining their policies toward the academically underprepared. More colleges and universities are beginning to accept some responsibility for the language deficiencies students bring to postsecondary education and provide mechanisms to alleviate and reduce these deficiencies. To date, however, studies on "program

effectiveness" have been very limited. Rarely have the results been disseminated on a wide scale. It seems that each institution is struggling alone; only when one professor has personal contacts at another institution are programs shared.

The following dimensions characterize evaluations of intervention programs:

1. There has been an increase of studies conducted in conjunction with college programs. Generally, the studies suffer from poor research methods and have not been replicated to produce generalizable results. Most research studies have evaluated programs or aspects of programs within or specific to particular institutions.

2. The most common type of evaluation method is the use of a simple two-group design with a t test to analyze pre- and post-test scores and differences in mean GPA using crude gains.

3. Few studies concentrate on the effectiveness of specific teaching methods appropriate to the college-age student.

The panel recommends research to describe intervention programs so that others can benefit from the results. These descriptions should include individual programs initiated by individual teachers; programs outside the traditional academic setting; programs initiated by an outside agency(ies) or agent(s) and placed in specific postsecondary settings; programs initiated and developed by the institution and selectively implemented; programs initiated by the institution and implemented for all students; programs developed under the GI Bill of Rights; and programs designed specifically for open admissions students. These descriptions should include positive as well as negative results and should show how the institutions have worked with their faculty to develop and implement these intervention programs.

We further recommend that descriptions, and in some instances surveys, of these programs be more than mere tabulations of tests, methods, and materials. What we need at this stage of "trial and error" is some insight into the pedagogical barriers impeding progress in this area.

Field consultants Robert and Deborah Cummings advise study of the institutional and professional restraints that exist between the "skills"-oriented faculty (e.g., reading improvement teachers), and the "content"-oriented faculty (e.g., history, literature). "Often," they write, "the two breeds seem not to mix." Specifically, there is no common agreement about whether all students who do not score well on diagnostic tests should undergo a substantial number of "skills" courses before they begin much "content" work, or whether "skills" study should be a kind of first aid for those students who

fall behind in "content" courses. In addition, there are "bad connotations to the idea of studying reading directly; it seems to have an aura of 'remedial' rather than 'real' college work." (Cummings and Cummings, 1974)

In some areas where there is a high prediction of student failure, some programs are running counter to expected failure outcomes. Some students are having a successful higher education experience. For example, in some open enrollment programs located in urban areas where there is often a high dropout rate, assistance in reading appears to aid students' retention. We need to gather data on programs that reflect various divergences in location, purpose, educational philosophies, and educational settings (i.e., universities without walls, open enrollment institutions, professional schools). An equally important and related question we need to investigate concerns training the faculty to understand the needs of these students. We should also investigate the integration of skills and content course instruction. Is it advantageous for skill and content course instructors to meet together to plan curriculums? On most campuses, skill instruction is not a "high status" position. The promotion system allows senior faculty to avoid skills courses, leaving the work to their juniors. It is important to note that very few "content" professors are knowledgeable about or have received training in the teaching of reading and writing. The institutional rewards for good teaching in the skills area are difficult to reap. We need to identify the successful attempts to overcome such barriers. For example, students may be able to overcome reading problems in freshmen biology if the university provides a resident reading specialist to team with the professor teaching the course. Through careful selection and control, educators could assess the effects of this type of intervention.

Another important avenue of investigation is the traditional concept of "introductory courses." It is safe to say that an introductory course in a new subject may pose serious problems for new students. Students, more often than not, bring little experience to this new discipline, so that the task facing the teacher is often insurmountable. Most introductory courses have large enrollments; most introduce a brand new vocabulary and are a very frustrating experience for the students with limited reading and writing proficiency. Many teachers are ill-equipped to deal with the problems now facing them, and are so "discipline"-oriented that they all too quickly write the students off and never provide the help and guidance they need. Educators need to conduct research to determine if introductory courses, as presently constituted, are positive and productive ways to teach new concepts. Do they help bridge the gap between "no knowledge" and "enough knowledge" to continue in a particular field? How can reading specialists and content teachers work together in such courses so that they are not at cross purposes, but are helping to alleviate many of their students' reading and writing problems? We have yet to experience all the possible approaches to the reading

and writing problems the open admissions policy presents. We need to investigate and describe intervention programs, where skills and content teachers work together. We must explore a variety of methods, e.g., successful tack-on programs that teach only reading and writing; programs that teach reading and writing in the context of content courses; programs that have brought about changes in students' reading and writing abilities without institutional commitment; and programs that have adapted themselves to changes mandated by the institution.

Research on program intervention will be an important contribution to those individuals working with open admissions students. Much research is now going on under the direction of the Fund for the Improvement of Post-Secondary Education, and there should be close communication between NIE and the Fund. One should not lose sight of the fact that the results of demonstration programs, both positive and negative, can advance the field. The time has come for careful analysis and description of intervention programs--those currently in existence and those waiting to be developed and tested.

Program 7.3.1:

Conduct descriptive and analytic case studies of reading and writing intervention programs with the following characteristics:

1. Individual programs initiated by individual teachers;
2. Programs implemented outside the traditional academic, institutional setting;
3. Programs initiated and developed by the entire institution;
4. Programs initiated by the institution and selectively implemented.

Program 7.3.2:

Describe present ideas of what constitutes introductory knowledge in specific disciplines and assess the validity of these ideas in the light of learning theories and task analyses of what students must ultimately be able to do in a specific discipline.

Program 7.3.3:

Develop evaluation guides and models for individual teachers to use when they evaluate intervention programs.

Program 7.3.4:

Study the effectiveness of various team arrangements in teaching reading and writing: Content teacher-skills teacher; counselor-teacher; skills teacher-psychologist.

APPROACH 7.4

EXPLORATION OF NEW INSTRUCTIONAL STRATEGIES

Approach Rationale

Experience thus far with the new students suggests the fruitfulness of some instructional approaches and the inadequacy of others. What we need now is a clearer sense of the pedagogical directions in which these successful experiences point and an understanding of ways to encourage institutional commitment to the new approaches. Using the current wisdom about the needs of new students, we can suggest several promising innovations worth investigating. We would also point out that many of the changes that seem worthwhile are going to appear to be major ones and may encounter institutional resistance. We should not blithely investigate such innovations without preparing for this resistance.

Two models for reading and writing instruction currently dominate the field: Separate skills training (the remedial model) and the integrated skills-content curriculum. In the former, students with problems are given separate remedial training in reading and writing. One criticism of such a model is that remedial classes, including the teachers and students, are generally looked down on in a college setting; such negative connotations reduce the potential for learning. In the second model, students receive skills training along with their regular coursework and learn skills in the context of regular course content. One problem with this model is that teachers who teach regular content courses usually do not have the skills or the inclination to help learners whose problems are not content-specific. Elsewhere, we have suggested collaboration between remedial skills teachers and regular content teachers in an attempt to facilitate the implementation of the second model. Here we suggest looking again at the two models and determining whether in fact we have to choose between them. It is certainly possible that one model is better for some tasks, and the other model is more suited to another set of learning tasks. For example, students may learn spelling better in the separate skills model, while they may learn composition better with the integrated skills-content approach. We could then design and test the operation of programs using each of these models where they are most appropriate.

Beyond the development of innovative programs which take advantage of the best aspects of both of the reading instruction models, we are also interested in innovations in two areas--the imaginative use of writing and speaking skills and the use of television to teach content areas and reading.

It seems worthwhile to use students' whole communications abilities, using strengths in some areas to improve weaker areas. It is unlikely that new students arrive at college with equal writing, reading, and speaking abilities. Through intensive testing in each of the three areas, we can assemble profiles to describe differing abilities of the new students. From these data, we could establish those strengths that we could use to deal with the students' weaknesses. For example, if a student demonstrated strong oral abilities in communicating about a particular concept, assigning the same concept area in reading might lead to more effective reading skills development.

Students might profitably use writing skills, and possibly improve them, in certain college subjects which are traditionally nonwriting subjects, e.g., psychology and biology. In such subjects, students typically convey to the teacher their understanding of the subject matter through "objective" tests, e.g., multiple choice or true-false. The absence of writing in these courses, however, may be unfortunate. There is some evidence that writing helps people organize and evaluate their thoughts; it seems to require people to take an "active" attitude toward the subject matter. In this way writing becomes a learning tool as well as a method of giving teachers a kind of information different from that which objective tests provide. We would, however, add a cautionary note. If the new students do not receive help with their writing, this use of writing in place of objective tests may put these students at an even greater disadvantage. Programs attempting to use writing as a learning tool should be sensitive to this problem.

Although much educational work with television has tended to lead students away from reading, the possibility remains that this medium could teach both specific course content and reading skills in general. Television can convey a variety of sophisticated concepts--witness the recent Kenneth Clark series Civilization and the series The Ascent of Man by Jacob Bronowski. A creative linking of such visual and oral transmissions of knowledge with reading might encourage students to search for the same kinds of ideas when they face only a text.

There may be an added advantage here if teachers themselves are able to design their own programs. In the course of translating the subject into the unfamiliar medium, teachers will have to refine their thinking and analyze the learning task in ways they may not have done before. The goal here is an alliance of teacher and technology to teach effectively both subject matter and reading skills.

We should not neglect the teachers themselves when we consider new strategies. They are the ones whose skills are crucial in implementing the new instructional approaches. Traditionally, college teachers have not received any teacher training per se; their training has focused on the development of expertise in a discipline.

Given the needs of the new students, this training is inadequate. Teachers now need to know how to convey information effectively, how to tailor material to the needs of students, how to diagnose problems, and how to help those students who are having problems.

As research suggested in this report produces an understanding of appropriate ways to meet the needs of the new students, we should put this knowledge into practice. We emphasize here the development of inservice teacher training to accomplish this goal, rather than training of new teachers. The market for teachers, particularly in the area of language arts and communication, is projected to be relatively low over the next 10 years. If institutions are to meet the demands of new students during this time, there will be a heavy demand placed upon inservice training programs. Some people may question the feasibility of such an approach to change, but the experiences of such programs as the Thirteen College Curriculum Program (which has undertaken the inservice training of a large number of teachers in different classroom techniques and the creation of curriculum) strongly indicates that such an approach can be effective in redirecting faculty energies.

Given our present understanding of some of the needs of the new students, we suggest that one focus of such training programs be on broadening the linguistic sensitivities of teachers. The new students enter college with a variety of speaking and writing styles. The preparation of most English teachers has focused on the great literature, and their idea of language style is defined by that literature. Similarly, teachers in other disciplines are accustomed to the writing style typically used in the research reports of that discipline. It might help to expose teachers to the broader phenomenon of language: The nature of language as an oral symbolic system, the nature of dialects, the history of English and how it continually changes in vocabulary, syntax, and pronunciation, and current thinking on reading, writing, and comprehension skills. This knowledge will help teachers both deal with the problems their students face and develop more positive attitudes toward the language styles of their students.

Lastly, we should give serious consideration to the institution as a whole and to ways of facilitating change within it. It should be apparent that responding appropriately to the needs of the new students on campus requires major changes in the institutions themselves, including new content, sequencing and structuring of courses, training of instructors, and augmented support services. There is often a tendency for institutions to resist such changes. However, in some colleges new practices are evident: All English department faculty members, rather than just the most junior members, must teach skills courses; class size is reasonably small, so that students have a better chance to participate and receive individual help; supplementary counseling services are available; substantial resources support skills instruction. In such colleges, the new students have had a major impact on the institution as a whole. What

are the elements that went into accomplishing these changes? Where did support come from? Who made the budgetary decisions? What role did the faculty play? How have the attitudes of the administration changed as a result of these new policies? Have hiring practices changed, and if so, how? Case studies of those institutions which did change may give valuable insight into the process by which an institution successfully reorganizes itself to accommodate the new students.

Program 7.4.1:

Study the relative merits of the two main models for reading instruction that now dominate the field: The separate skills training (remedial model) and the integrated skills-content curriculum.

Program 7.4.2:

Explore ways of using television to strengthen the desire and ability of students to read.

Program 7.4.3:

Explore the introduction of writing as a learning tool in traditionally nonwriting courses.

Program 7.4.4:

Study the interrelationships of writing, reading, and speaking to discover how the strengths in one area of communication can assist weaknesses in another area.

Program 7.4.5:

Design and implement demonstration projects for teachers with special emphasis on inservice training.

Program 7.4.6:

Study the ways in which the linguistic sensitivities of teachers may be improved. Assess the effect of this improvement on the language abilities of the "new" students in their classes.

Program 7.4.7:

Conduct descriptive and analytic case studies of colleges which have taken the lead in attempting to meet the needs of the new students.

PANEL 7: BIBLIOGRAPHY

Beringhause, A. F. Reading improvements for college students. The College English Association Journal, 1965, 28, 4-6.

Bingen, P. Education in the world of work. Change, 1973, 5, 35-37.

Blake, E. Future leadership roles for predominantly Black colleges and universities in American higher education. Daedalus, 1971, 100, 745-771.

Bucklin, R. and Bucklin, M. L. The marginal college freshman: a survey and proposed student personnel services model. Eastern Michigan University, 1971.

Cummings, R. and Cummings, D. Planning paper: report to the NIE Conference on Studies in Reading, 1974.

Dubois, R. Improvement of textbook comprehension in college reading classes. Journal of Reading, 1969, 13, 113-118.

Egerton, J. Harlem's higher education volunteers. Change, 1973, 5, 42-44.

Finch, R. H. Career education: a program for community colleges. Junior College Journal, 1969, 40, 12-14.

Fingaret, Arlene. Planning paper: report to the NIE Conference on Studies in Reading, 1974.

Glenn, M. L. The improvement of reading at the community college level. Journal of Developmental Reading, 1964, 7, 318-322.

Harshburger, M. A university reading and study skills program for high risk students. Paper presented at the Annual Meeting of the International Reading Association, 1972 (ERIC Document 063 574).

Klasser, B. Another college reading center: how should it be designed? Reading World, 1972, 11, 241-244.

MacDonald, J. E. College training program for marginal students. College Student Personnel, 1972, 13, 568.

Miller, T. Open door versus the revolving door. The Education Digest, 1973, 38, 26-29.

National Reading Center, Open admissions of college students and poor reading skills. Intellect, 1972, 101, 75.

Panes, Paul. Planning paper: report to the NIE Conference on Studies in Reading, 1974.

Perry, W. Students' use and misuse of reading skills, a report to the faculty. Harvard Educational Review, 1954, 29, 192-200.

Phillips, G. Reading instruction in CUNY's open admissions program. Reading World, 1972, 11, 196.

Price, A. Developmental reading for all college freshmen. Journal of Reading, 1966, 9, 333-334.

Pyrczak, F. Passage-dependence of items designed to measure the ability to identify the main ideas of paragraphs: implications for validity. Educational and Psychological Measurement, 1974, 34, 343-348.

Thompson, K. A survey of reading programs at Black colleges and universities. National Institute of Education, 1974.

Turner, F. J. The Frontier in American History. New York: Henry Holt & Co., 1920.

Turning, J. Content-area reading skills and the community-junior college. Journal of Reading, 1972, 15, 347.